TITLE OF THE INVENTION

Bra with Reinforced Cups

APPLICANT

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BACKGROUND OF THE INVENTION

1. Field of the Invention:

The invention broadly relates to bras.

2. Prior Art:

A conventional bra shown in Fig. 1 includes a horizontal adjustable back strap 10 attached to the bottom edges of a pair of cups 11 and 12, and a pair of vertical adjustable shoulder straps 13 and 14 attached to the tops of cups 11 and 12. Cups 11 and 12 are made of a relatively thin material that are prone to sagging under the weight of large breasts. Therefore, such bras do not provide the necessary support. Although shoulder straps 13 and 14 can be tightened to pull cups 11 and 12 upward, the breasts are flattened out of shape in the process.

BRIEF SUMMARY OF THE INVENTION

The present bra includes a horizontal back strap and a pair of cups. Vertical shoulder straps are connected between the tops of cups and back strap. Non-stretchable reinforcing rings are attached to the fronts of cups concentric with nipple areas thereon. The rings have open centers for comfort. Non-stretchable suspension strips are connected between respective rings and

shoulder straps. The strips are sized to suspend rings at predetermined positions relative to the top ends of the cups to prevent the forward portions of the cups from sagging under the weight of large breasts. The rings maintain the shapes of the cups to prevent them from flattening the breasts when the shoulder straps are tightened. A second embodiment includes shoulder straps which are movable upward and downward through slide buckles attached to the tops of the cups for adjusting the lifting of the cups.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING

Fig. 1 is a front perspective view of a prior art bra.

Fig. 2 is a front perspective view of the present bra with reinforced cups.

Fig. 3 is a front perspective view of a second embodiment of the present bra.

Fig. 4 is a front perspective view of the bra of Fig. 3 with the shoulder straps tightened.

DRAWING REFERENCE NUMERALS

10. Back Strap
11. Cup
12. Cup
13. Shoulder Strap
14. Shoulder Strap
20. Back Strap
21. Cup
22. Cup
23. Shoulder Strap
24. Shoulder Strap
25. Ring
26. Ring
27. Nipple Area
28. Nipple Area
29. Strip
30. Strip
31. Stitching
40. Back Strap
41. Cup
42. Cup

43. Slide Buckle
44. Slide Buckle
45. Shoulder Strap
46. Shoulder Strap
47. Ring
48. Ring
49. Nipple Area
50. Nipple Area
51. Stitching

DETAILED DESCRIPTION OF THE INVENTION

Fig. 2:

In accordance with a first embodiment of the invention shown in the front perspective view of Fig. 2, the present bra includes a horizontal back strap 20 for positioning around a torso. Back strap 20 may have a front closure or a back closure, and may be adjustable in length. Back strap 20 is attached to the bottom edges of a pair of cups 21 and 22 arranged for supporting a pair of breasts. Vertical shoulder straps 23 and 24 are connected between the tops of cups 21 and 22 and back strap 20 for strapping around a pair of shoulders.

Non-stretchable reinforcing rings 25 and 26 are attached to the fronts of cups 21 and 22 concentric with nipple areas 27 and 28 thereon. Rings 25 and 26 are made of a more rigid material than cups, and have open centers for comfort. Non-stretchable suspension strips 29 and 30 are connected between respective rings 25 and 26 and shoulder straps 23 and 24. Rings 25 and 26 and strips 29 and 30 are fixedly attached to cups 21 and 22, for example, by stitching 31. Alternatively, other means of attachment may be employed. Strips 29 and 30 are preferably integral extensions of shoulder straps 23 and 24, although they may be separate from straps 23 and 24 but fixedly connected to them.

Strips 29 and 30 are sized to suspend rings 25 and 26 at predetermined positions relative to the top ends of cups 21 and 22 to prevent the forward portions of cups 21 and 22 from sagging under

the weight of large breasts. Rings 25 and 26 maintain the shapes of cups 21 and 22 to prevent them from flattening the breasts when shoulder straps 23 and 24 are tightened.

Figs. 3-4:

A second embodiment of the present bra is shown in Figs. 3-4. In Fig. 3, it includes a horizontal back strap 40 for positioning around a torso. Back strap 40 may have a front closure or a back closure, and may be adjustable in length. Back strap 40 is attached to the bottom edges of a pair of cups 41 and 42 arranged for supporting a pair of breasts. Slide buckles 43 and 44 are fixedly attached to the tops of cups 41 and 42. Vertical shoulder straps 45 and 46 are connected between slide buckles 43 and 44 and back strap 40 for strapping around a pair of shoulders.

Non-stretchable reinforcing rings 47 and 48 are attached to the front of cups 41 and 42 concentric with nipple areas 49 and 50 thereon. Rings 47 and 48 are fixedly attached to cups 41 and 42, for example, by stitching 51. Alternatively, other means of attachment may be employed. Rings 47 and 48 are made of a more rigid material than cups, and have open centers for comfort. The lower ends of shoulder straps 45 and 46 are fixedly connected to respective rings 47 and 48, but are not fixedly connected to cups 41 and 42. The tops of cups 41 and 42 are movable along shoulder straps 45 by moving slide buckles 43 and 44 to adjust the distance between rings 47 and 48 and the tops of cups 41 and 42, and thus control the lifting of cups 41 and 42.

In the example shown in Fig. 4, shoulder straps 45 and 46 are shortened between rings 47 and 48 and the tops of cups 41 and 42 for lifting the forward portions of cups 41 and 42 to prevent the cups from sagging under the weight of large breasts. Rings 47 and 48 maintain the shapes of cups 41 and 42 to prevent them from flattening the breasts when shoulder straps 45 and 46 are tightened. Shoulder straps 45 and 46 can also be lengthened between rings 47 and 48 and the tops of cups 41 and 42 for reducing lifting when desired.

SCOPE

Although the above description is specific, they should not be considered as limitations on the scope of the invention, but only as examples of the embodiments. Many variations are possible within the teachings of the invention. For example, different attachment methods, fasteners, materials, dimensions, etc. can be used unless specifically indicated otherwise. The relative positions of the elements can vary, and the shapes of the elements can vary. Therefore, the scope of the invention should be determined by the appended claims and their legal equivalents, not by the examples given.